DOCUMENT RESUME

ED 046 722 SE 010 445

AUTHOR	Buchinger, Maria
TITLE	Saving Natural Areas.
INSTITUTION	Foresta Inst. for Ocean and Mountain Studies, Washington, D.C.
REPORT NO	Pub-1
PUB DATE	Sep 69
NOTE	56p.
AVAILABLE FROM	FORESTA Institute for Ocean and Mountain Studies, 1701 18th St., N.W., Washington, D.C. 20009 (Donation)
EDRS PRICE	EDRS Price MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	Conservation Education, *Environment, *Environmental Education, *Forestry, Guidelines, *Land Use, Management, Natural Resources, Private Agencies, *Resources, Voluntary Agencies

ABSTRACT

This manual serves as a handbook for those involved in the art of land saving. The various topics in the booklet are dealt with in great detail since little has been published on the preservation of natural areas in international publications. Most of the document is derived from articles, books, and publications published by, or describing the work of the Nature Conservancy and other land saving organizations in the United States. Aspects of land saving include a description of the natural areas, how they are designated, preserved, problems encountered, planning, administration, and management. The second part of the manual indicates how to form a land acquisition, and preservation organization, including by laws, board of governors, members, raising funds and cooperation with related organizations. (BB)

SAVING NATURAL AREAS

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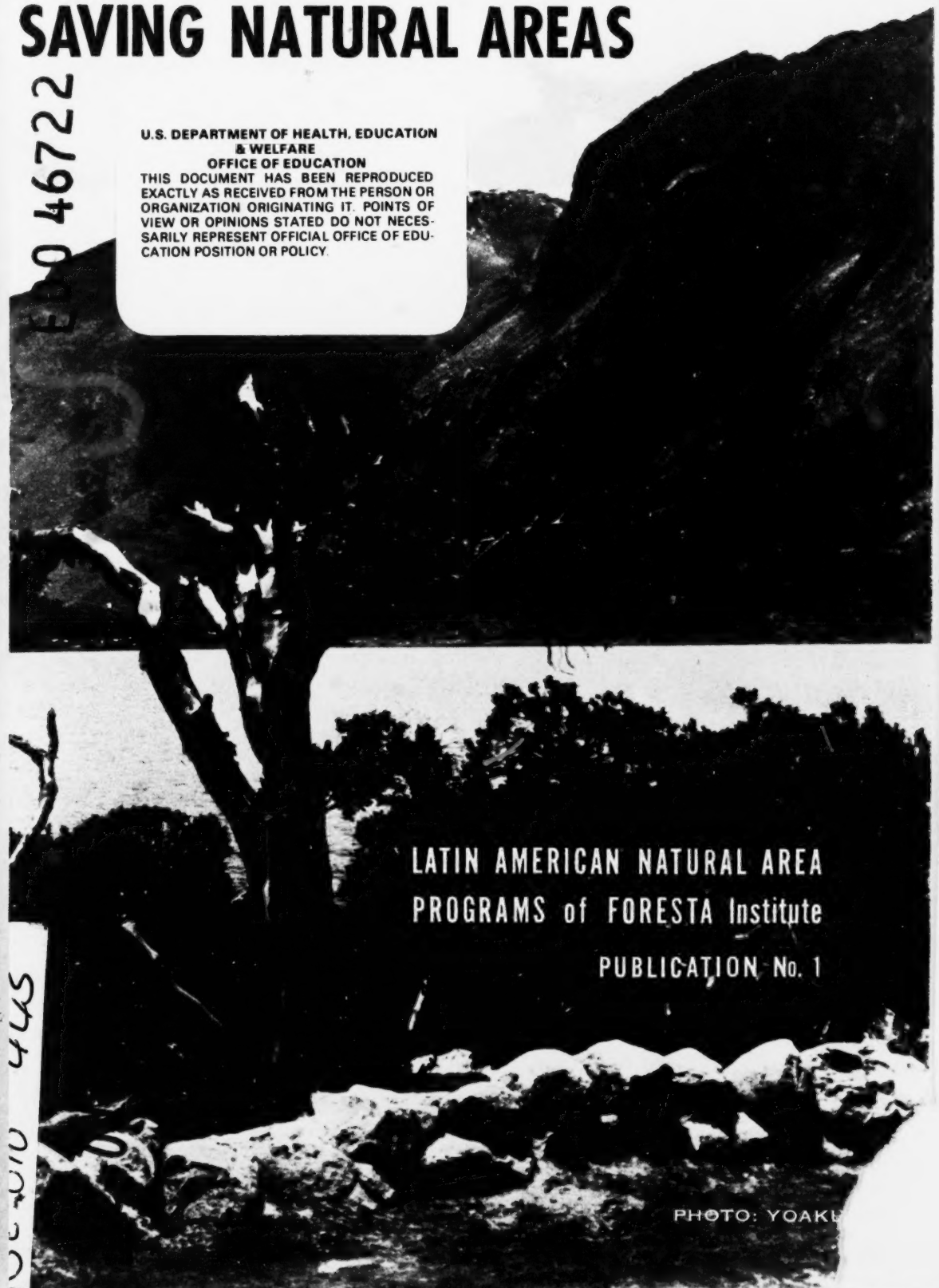

LATIN AMERICAN NATURAL AREA
PROGRAMS of FORESTA Institute

PUBLICATION No. 1

PHOTO: YOAKU

SE 010 445

TABLE OF CONTENTS

Foreword 1

Introduction 2

The Nature Conservancy in the U.S.A. 3

Areas Which Should be Preserved 5

Why Should Natural Areas be Preserved? 6

How to Obtain the Preservation of Natural Areas 7

Natural Area Project Proposal 8

Problems of Land Acquisition 9

A. Land Appraisal 9
B. Legal Aspects of Land Acquisition 11

Planning, Administration and Management 11

How to Form a Land Acquisition and Preservation Organization 15

The Nature Conservancy Bylaws 16

Board of Governors 16

Administrative Office 17

Rights and Duties of Members 18

Membership Units 19

Financing the Program 20

Fund Raising 20

Cooperation with Related Organizations 22

International Help - When and Where 30

Case Histories 36

Check List of Criteria ..... ANNEX A

Legal Aspects of Land Acquisition ..... ANNEX B

Reverter Clause ..... ANNEX C

The Nature Conservancy Bylaws ..... ANNEX D

FOREWORD

Inquiries have come about natural area acquisition and protection problems in such numbers from individuals, communities, and agencies, that one is confident of the welcome this manual will receive both domestically and among friends in Latin America as well as throughout the world.

It is fortunate that such expert material is now at hand, and that it already has been referred to, corrected and approved by the last three presidents of The Nature Conservancy and by numerous other advisors, and that it can now serve the immediate conservation needs of Latin America and other parts of the world.

Dr. Buchinger's approach is broad, yet with the specific detail and examples needed to apply to unique situations. In fact, with land saving, each project is unique and circumstances may soon arise for which no designed approach is ready.

Anyone who reads this manual, however, will be forewarned, and alerted to the many problems that one needs to be prepared for. Then, in the actual fascinating process and rewarding experience of negotiating the saving of natural areas, one can refer quickly to it for a supporting plan or comment. Variations on the theme will be necessary, but the reader must remember with satisfaction that the methods and advice and example here provided, have evolved through more than 20 years of sometimes desperate concern, and are the product now of the community of effort of discerning, devoted and selfless people who believed a project was worth their whole involvement and were convinced of the crying need of the land for a champion to save its remaining natural areas.

One must not despair. In this work one finds many friends. They are of the kind that in the United States of America alone have saved many hundred thousands of acres of natural areas.

RICHARD GORDON MILLER
President
FORESTA Institute

INTRODUCTION

Individuals and groups interested in saving natural areas or in establishing organizations dedicated to the permanent preservation and protection of natural areas, often ask for guidelines to help them in their efforts. The requests are manifold: scientists are interested in working models, bylaws, and in organizational aspects; amateur nature lovers want to know why and how natural areas should be saved; others are concerned with the relationship between a new landsaving group and already existing groups. The Nature Conservancy of the United States and, on the international level, its Latin American Desk have answered some of the questions in several publications but this has not been enough.

Some years ago, an Argentinian group suggested to Dr. Walter S. Boardman, then Director of The Nature Conservancy of the United States, that he consider publishing a manual which would serve as a self-sufficient handbook for those involved in the art of land saving. Furthermore, the demand for international cooperation became so strong that the activities of the Latin American Desk had to be expanded. In April of 1969, The Nature Conservancy of the United States yielded the administration of all its Latin American programs to FORESTA Institute for Ocean and Mountain Studies which set up the "Latin American Natural Area Programs". Because LANAP works towards the same objectives as did the former Latin American Desk, it was deemed timely -- as the new office got underway -- to publish the present booklet.

Since great numbers of prospective readers live in countries where not much has been published on the preservation of natural areas, and because these people have little opportunity to receive additional material, the various topics in the booklet are dealt with in great detail. Most of the text has been compiled from articles, books, and bulletins published by, or describing the work of The Nature Conservancy and other landsaving organizations in the United States of America. Fifty copies of the First Draft were circulated among officers and friends of The Nature Conservancy in the United States and among Latin Americans engaged in land saving activities. Their constructive criticisms were greatly appreciated and have been incorporated in this booklet.

A Spanish version is now being prepared.

THE NATURE CONSERVANCY OF THE U.S.A.

The Nature Conservancy of the United States of America is a nationwide non-profit organization whose primary purpose is to acquire land for the protection of outstanding natural areas. These lands will be kept essentially in their natural state for generations to come. The objectives of The Nature Conservancy, as stated in Article II of its Bylaws, are: "(a) To preserve or aid in the preservation of all types of wild nature, including natural areas, features, objects, flora and fauna, and biotic communities; (b) to establish nature reserves or other protected areas to be used for scientific, educational, and esthetic purposes; (c) to promote the conservation and proper use of our natural resources; (d) to engage in or promote the study of plant and animal communities and of other phases of ecology, natural history, and conservation; (e) to promote education in the fields of nature preservation and conservation; and (f) to co-operate with other organizations having similar or related objectives." The program of land acquisition receives top priority because once a beautiful or unique area is destroyed it is gone forever.

The Nature Conservancy had its origin in a committee of scientists within the Ecological Society of America in 1917. This Committee for the Preservation of Natural Conditions undertook a comprehensive inventory of the natural environments of the North American continent, together with a survey of all natural areas then known to be safely preserved. This resulted in the publication in 1926 of the monumental Naturalist's Guide to the Americas. This was the first large scale attempt to compile information on existing natural habitats of scientific value. The Committee also took action to have set aside from other uses many other areas. Among the successful efforts it led were the establishment of the Glacier Bay National Monument in Alaska and of Porcupine Mountain State Park in Michigan. Through the persuasive efforts of biologists in government service or universities and colleges, it had widespread influence on governmental policies and research programs.

In 1946 members of the Committee formed an independent organization, the Ecologists' Union. In 1950 it adopted the name "The Nature Conservancy". This name was inspired by the establishment of a Nature Conservancy in Great Britain. There, however, it is not a private organization, as is The Nature Conservancy of the U.S.A., but an agency of the national government

"Conservancy", according to the dictionary, is another word for conservation. But it is also used to denote an agency engaged in specific conservation work. Thus, there might be a "Soil Conservancy" or a "Water Conservancy". The Nature Conservancy chose its name because it best expresses a broad interest in preserving nature and it also implies an organization that takes concrete action.

In October 1951, The Nature Conservancy officially became a member governed, non-profit corporation, incorporated under the laws of the District of Columbia, and began to seek private donations for its support. It launched projects to save natural areas. It raised funds for their purchase, accepted gifts of land as biological sanctuaries. It entered the field of owning and maintaining nature preserves. By 1969, The Nature Conservancy had been involved in 350 projects, located in forty states, and totalling approximately 115,000 acres.

The excellent results achieved by The Nature Conservancy in the United States and its longstanding experience prompted interest in other countries. The organization as such, and members of its Board of Governors as individuals received very frequent inquiries on land saving problems. Most requests came from the Western hemisphere. To give these inquiries more effective attention, a Latin American Desk was established in 1964. In 1969, The Nature Conservancy yielded the administration of all its Latin American programs to FORESTA Institute for Ocean and Mountain Studies and continued, however, as a cooperator. The objectives of the new office remain the same as they were in The Nature Conservancy:

1. To serve as a clearinghouse for information concerning efforts to save natural areas in Latin America.

2. To encourage and give practical advise to individuals and organizations concerning the acquisition and preservation of natural areas in Latin America.

3. To prepare informational publications to promote public understanding and governmental enlightenment on the value of natural areas in Latin America, and the establishment of private non-profit organizations similar to The Nature Conservancy of the U.S.A.

4. To serve as an advisory guide to Latin American project committees for those endeavors in land preservation where a national organization has not been established within that country.

AREAS WHICH SHOULD BE PRESERVED

Wherever possible, the preservation of samples of the following areas should be encouraged:

1. All stable natural vegetation types, such as forest types.

2. Aquatic habitats, including ponds, lakes and streams, seashores, and coral reefs.

3. Habitats for species which are in danger of becoming extinct.

4. Vegetation maintained by biotic activity, such as grazing by ungulates.

5. Familiar vegetation types that require management for their maintenance, such as some kinds of burned savanna.

6. Physiographically active situations, such as beaches, dunes, marshes and cliffs.

7. Open space of exceptional natural beauty.

To evaluate proposed natural areas in relation to their suitability to the stated objectives, The Nature Conservancy of the United States recognizes three broad degrees of past human influence on land.

Uninfluenced by Man. This is confined to primitive areas where the activities of modern man have been negligible and nature has reigned supreme. Such areas are indeed rare in most countries of the world today.

Affected by Man. In this class fall those areas which have been affected by man in the past but are now dominated by natural processes. An example might be a second growth forest lumbered lightly a hundred years ago. Such an area has evidently been affected by man because of the old logging, but by present day standards, such a tract of woodland can be considered a natural area. Quite often historical studies of the area are necessary to find out if an area was previously affected by man or if changes were due to natural processes.

Managed by Man. Areas in this class may have natural values, but they have ceased to be 'natural areas' because from time to time man has manipulated the factors affecting their ecological relationships. Such lands may be in public or private ownership and are being (or have been) used for farming, timber, grazing, wildlife management or recreation. Often, they have recently ceased to be used by humans and nature has begun to reestablish the natural communities.

Thus in order to talk about a natural area it is necessary to determine whether it is an undisturbed area, a relatively

undisturbed one, or simply open space. It has been said that any piece of open space, if allowed to remain undisturbed by human activities for one hundred years, becomes a good representative of the natural processes. Generally, this appears to be true. In and around big cities, every acre of open space is especially valuable and efforts should be made to preserve it regardless of the present degree of naturalness.

WHY SHOULD NATURAL AREAS BE PRESERVED?

PATRIOTIC VALUES.

Natural areas have historical values since they represent samples of the natural heritage of every nation in exactly the same way as the colonizing forefathers found them. The unaltered landscape and the original plants and animals are the most authentic characteristics of each place, in which all innabitants of the region can take pride.

SCIENTIFIC VALUES.

Together with the growing appreciation for the value of relatively undisturbed samples of the environment, there is also a growing need to safeguard such areas. It is obvious that the study of natural ecosystems holds the answer to many outstanding questions in pure and applied natural and physical sciences. Great variety of researches can be undertaken in natural areas which can also be used as controls to compare the natural vegetation types with managed and utilized ecosystems.

ECONOMIC VALUES.

Natural areas represent heterogeneous plant and animal gene pools. That is to say, collections of plant and animal species which can spread from these centers and are or can be used in the future. They may serve to reestablish or genetically improve commercial stocks. The values which scenic areas represent for national or international tourism are well known. Man has only began his exploration of the potential uses of nature's stock of organisms.

EDUCATIONAL VALUES.

Inter-relations of organisms and between them and their environments are of importance to all biological disciplines and many of the physical sciences. Recognizing this, schools and universities use natural areas to study species and communities. Natural areas are outdoor laboratories and museums where youngsters and adults can observe nature in action and the values it represents to humanity.

RECREATIONAL VALUES.

Natural areas can play an important role in the development of intellectual and esthetic appreciation. They are sources of healthy recreation for the human body and at the same time inspire mind and soul with their beauty and uniqueness.

MORAL OBLIGATION.

In the last fifty years human activity has modified the surface of planet Earth to a greater extent than through all the thousands of years of previous human history. In the present days, all kinds of natural conditions are threatened with extinction, which makes the preservation of natural areas a matter of great urgency. It is, therefore, a moral obligation of the present generation not to destroy all the natural heritage but to safeguard at least viable samples of it for the enjoyment and benefit of future generations.

HOW TO OBTAIN THE PRESERVATION OF NATURAL AREAS

COOPERATION WITH GOVERNMENTAL AGENCIES.

Land holding agencies can be approached with well documented petitions to set aside certain areas for perpetual preservation. The government can include such an area in the national, or state park system or as an inviolable part of wildlife refuges or forests.

When the land is not owned by the government, organizations similar to The Nature Conservancy of the U.S.A. might assist the governmental agencies in their natural area acquisition programs. Because it is a private organization it can often act with greater flexibility and speed and therefore economy than the agencies themselves.

ACQUISITION OF LAND.

Natural areas can be acquired in two ways: either by gift or by purchase. When the purpose of the preservation of natural areas is adequately presented to land owners they often decide to donate the tracts to a dependable, private, non-profit land saving organization. The gifts of land can be either a deed or by legacy from the donor.

Without previous experience, many persons are unnecessarily hesitant to approach the owner of a potential nature reserve because they fear being rebuffed. Perhaps the most natural approach is to call on the owner and express an interest in the natural history values of his property. Frequently an area has been protected because the owner already had a feeling for its undisturbed beauty. He will be pleased to discover a sincere interest in it by someone who shares his feelings. He may be fascinated by the information you can give him about it.

Most property owners appreciate being asked for permission to enter their property. Sometimes owners reputed to be hostile toward visitors are happy to have qualified persons enter, providing they first ask for permission and have a justifiable reason. Respect for an owner's rights go a long way towa obtaining his sympathy.

It is usually better not to attempt to go too far in a first interview. Instead, it should be limited to establishing one's interest and qualifications and to give information on the land saving group. Assistance in making an appropriate and accurate statement concerning the group should be obtained from the organization's headquarters.

In later visits the owner may quite easily be engaged in a discussion of the possibility of his property becoming a nature reserve. He will want to know how it has been done elsewhere, how the property is to be maintained and protected and how it will be used. With gradual acquaintance, sympathy and trust, the owner's support can be enlisted. In many instances tax reduction benefits can be pointed out. The owner then might be willing to donate the property or to dispose of it in favorable terms. The possibilities of acquiring the land by gift should be explored before any purchase price is discussed. The owner then becomes a partner in the project and often can be of great help in getting community interest behind it.

If an area is owned by persons interested only in real estate values, one may make a straightforward inquiry about the sale price and terms. An appraisal should be obtained in any case where an outright purchase is being contemplated at approximate market values.

In the case of purchase The Nature Conservancy usually depends on a local project committee to raise the funds. However, quite often loans are made available to these groups from the national office to purchase the land. Loans to The Nature Conservancy groups can be interest-free for the first year with minimal rates after that. There is no set time limit on repayment, but since the loan fund works on a 'revolving' basis, the sooner loans are repaid, the sooner funds become available for new projects.

NATURAL AREA PROJECT PROPOSAL

WHO CAN PROPOSE THE INITIATION OF A PROJECT.

Any individual, group, or visitor of the region may suggest an appropriate area for consideration to be preserved.

SELECTION OF CRITERIA.

It is not possible to provide definite guidelines for the evaluation of conditions of a natural area at the time of its selection. Natural areas however should be of such size and extent that an adequate degree of protection and preservation can be warranted for the type of feature being preserved.

CHECKLIST OF CRITERIA FOR EVALUATING CANDIDATE AREAS AS NATURE PRESERVES.

(See Annex A)

NATURAL AREA PROJECT PROPOSAL.

A checklist of preliminary information to be submitted to the land saving organization should include all, or most of the following data.

1. Local name or way of designating the area:
2. General location: County.....; State.....
3. Detailed location: Boundaries indicated on attached standard map... Topographic map of equivalent... How to reach from highway...
4. Acres or hectares:
5. Ownership: (names and addresses)
6. Valuation: Offered or likely to be offered as a gift:..... Sale..... Price... Option desirable... Possibility of Endowment...
7. Description of area: topography, biotic communities with areas, geologic and scenic features, rare plants and animals (by name), artificial structures such as buildings, roads, trails, present use of area, general history of area including fires or floods, and human disturbances such as farming and lumbering: (include photographs if possible)
8. Special problems: Trespass... Hunting... Picknicking... Stray animals... Exotics... Fire.... Other...
9. Technical opinion: (names and addresses of one or more ecologists or specialists who know the area or have seen it and could testify as to its preservation aspects)
10. How was project initiated locally:
11. Availability of local people: For Project Committee... For Custodian... For Scientific Research... For Education and Publicity... For Fund Raising...
12. Attitude of local community: To what degree is the project known locally?...List local organizations in support of the project ... Cite specific opposition...
13. Justification and comments: (such as statement on priority, need, specific method of purchase, etc.)

PROBLEMS OF LAND ACQUISITION

A. LAND APPRAISAL

THE PURPOSE OF APPRAISAL IN A LAND ACQUISITION PROGRAM

No land acquisition program should be undertaken without some plan in mind as to how much land is needed, where it is located, and what is to be done with it. The next question, and a very important one, is "How much will it cost?" An appraisal is the answer

to this question in terms of how much it should cost.

WHAT IS A LAND APPRAISAL?

An appraisal is an estimate of value.

An appraisal may be an oral statement or a detailed report. The quality of the report cannot be measured by its appearance or the fact that a statement has been made under oath, but rather by the amount of research which has been done and the experience of the appraiser.

An appraisal may also be classified as a statement of the fair market value of land; in other words, the fair value in dollars and cents on the current market. The market is established by people buying and selling land freely, without pressure to buy or sell, and each person being fully aware of what he is doing.

An appraisal never creates a value. It merely tries to approach true value. In the final analysis, an appraisal is the opinion of the appraiser as to the fair market value, after considering all factors affecting the value of the land.

HOW IS AN APPRAISAL MADE AND WHO SHOULD MAKE IT.

An appraisal should begin with three known facts:

1. The amount of land to be purchased.
2. The location of the land.
3. The tenure which is to be acquired on the land.

The first step is to construct an ownership map of the area under consideration. The best way is to base it on aereal photography.

Step number two is to classify the quality of the land as to grades existing in that particular locality and to make an estimate of any timber present on the land. Step number three is to inspect, photograph, and take notes on all improvements found on the land. Now the preliminary basic field work covering the land to be appraised is completed.

There are a number of methods of appraising land, one of the methods most frequently used is to compare the land under consideration with the recent sales of similar land in the locality.

Appraisals should be made by a man who is experienced in the work or by someone who is truly interested in becoming experienced in land acquisition work.

WHAT INFORMATION SHOULD ONE GATHER AND HAVE ON HAND IN CONNECTION WITH A LAND PROJECT.

There is a fair amount of preparative work which can be done without getting too deeply into the appraisal question. If the following information can be made available before the appraiser goes on to a job, he will be in a much better position to carry on his work efficiently:

1. Have a map of the project giving its extent and boundaries.
2. Prepare a list of current owners which corresponds with those shown on the tract map.
3. Prepare a list of assessed valuations for the tracts involved.
4. Prepare a list of known recent sales which might cover land similar in some respects to that in the project areas.
5. Obtain aerial photographs, the most recent if available.

HOW SHALL ONE USE AN APPRAISAL REPORT IN CARRYING NEGOTIATIONS.

An appraisal report is confidential information restricted to the person who prepared it and for the use of the parties for whom it is made. The vendor should never see the appraisal. The appraisal report should be studied thoroughly and then safeguarded where it will not become available to anyone not authorized to see it. The appraisal report gives maximum figures and if these values are exceeded in the negotiations, it is so done at the buyer's own risk.

B. LEGAL ASPECTS OF LAND ACQUISITION UNDER THE NATURE CONSERVANCY OF THE U.S.A.

(See Annex B and C)

PLANNING, ADMINISTRATION AND MANAGEMENT

PLANNING.

The preservation of biological communities for scientific research, educational purposes, or any other reason should include provisions for long-range continuity of ownership and administration. As the geologic, climatic, edaphic, and biological features of an area are described and documented through a series of studies, its scientific value becomes progressively enhanced. At the same time, real estate values are almost certain to be increasing along with encroachment threats and management problems.

In order to establish a nature preserve that will carry through for several generations without change or perversion, great care and foresight must be exercised. Plans for the establishment of

preserves should, wherever possible, include the following: 1) Continuity of ownership, 2) appointment of watchdog agencies with the power to act, 3) source of funds for management, 4) real estate tax exemption, 5) the development of good public relations and of appreciation for the value and objectives of the project, especially by residents of the area.

ADMINISTRATION.

In order to secure continuity of ownership and purpose, it is essential that the property be in the hands of an institution or appropriate group of people. Reverter clauses and covenants are devices which assure such continuity. In certain instances, it is also desirable to designate an alternate agency in case the initial one becomes dissolved.

Where possible, the provision for funds for management of the natural area should be arranged. Sometimes this can be achieved through an endowment and sometimes through some revenue-bearing asset connected with the property.

Usually a local project committee is in charge of the administration of a natural area. This is a much healthier situation than having an area under the control of only one person. Joint authority is likely to provide a greater diversity of ideas for research projects and a better chance for continuity in research and educational activities. At the same time, with a number of people serving on a committee to administer an area, the chance of permitting a particular activity to destroy the natural characteristics of the preserve is greatly reduced.

Some of the larger natural areas have full time directors. In other cases a resident caretaker is hired and the administrative office of a college, university, museum, or other agency administers the lands. Garden clubs, local scout groups, and other civic organizations may also be approached to assist with the administration.

The custodian or custodians are appointed on a volunteer or paid basis. Preferably it should be someone living near the natural area, a person available at times when his various activities may be needed, and someone in sympathy with and understanding of the objectives of permanent land preservation.

The duties of the superintending custodians of The Nature Conservancy of the U.S.A. are as follows:

1. Posting or maintaining entrance signs. It is the established policy of the Board of Governors that there should be an appropriate and attractive sign conveying certain minimum information at entrances to The Nature Conservancy's "natural areas" which are open to the public.

2. The maintenance of artificial structures is another function of the superintendent or the Project Committee. Twice a year, in spring and fall, a careful inspection of all such structures should be made and a report prepared in writing as to their safety for use by the public. A copy of this report must be sent to the National Office of The Nature Conservancy. This procedure has been advised in connection with the responsibilities under liability insurance.

3. Boundary Inspection. Signs and notices should be checked periodically, and replacements made as needed. Any infringement or damage from adjacent owner activities should be reported to the Project Committee.

4. Clean up rubbish. This appears to be a universal problem, whether a property is officially open to the public or not. No easy solution has been foud. The slow process of education is the best tool. Rubbish containers and signs at parking areas and permitted picnic places will help. Litter allowed to collect in public places encourages further littering.

5. Information. The custodian is the on the ground source of information about the natural area. He should know what activities and 'uses' are permissible for each particular part of a zoned natural area. He should provide directions for reaching the area to those entitled to visit it.

6. Permission. If permission for entry is required, the custodian will issue passes by mail or in person, according to the system that has been set up by the Project Committee.

7. Patrol for trespass. The custodian, or someone reporting to him, is responsible for patrol of the natural area. This function varies greatly from one area to another according to individual requirements. The need may be at certain times of day or on certain days or specific times of year.

8. Public relations. One of the most important functions of the custodian is to foster good public relations. It is important to gain friends for The Nature Conservancy objectives and not to make enemies. This requires a good understanding of people's reactions. At times firmness will be needed.

9. Interpretive publications. The custodian should have literature on The Nature Conservancy available. It is highly desirable that the Project Committee keep him supplied with interpretive leaflets for the particular area which give general information on why it was preserved, how it serves the public, and its possible uses for research.

MANAGEMENT.

A natural area must be protected against activities which directly or indirectly modify natural processes or alter the type or feature which is being preserved.

Management of a natural area depends on the purpose for which the area is being maintained. The following objectives might be considered, although obviously they are not all and simultaneously appropriate for each area.

1. To permit natural processes to take place uninfluenced by man.
2. To attempt to maintain the present situation, even though to do this might require deliberate manipulation.
3. To re-create a former community, or presumed former community, although it seems that this rarely would be desirable.
4. To minimize the effects of necessary or unavoidable commercial influences.
5. To maintain esthetic qualities.
6. To exclude rigidly exploitative or commercial activities.
7. To encourage and provide for the carrying on of compatible scientific research activities.

To carry out these objectives, the following procedure is suggested by The Nature Conservancy of the U.S.A.

1. Establish the boundary on a map. This can be done from the land description or survey. Mark the physical boundary on the property itself by signs, paint blazes, or, as last resort, a fence. This is a last resort because fencing may destroy some of the natural properties or scenic values.

2. Develop a master plan. The first step is to inventory the flora and fauna now existing. From this, a long range plan can be developed. This would include scientific research. If the plants and animals, watershed, outcrops, fossils, etc., are not endangered a plan for heavier use by the public can be considered, but the limits of this should be determined at the onset.

3. Set up a suitable preservation policy for the particular preserve. This, of course, varies with the qualities and requirements of individual preserves. Requirements should provide that (a) land should be perpetually preserved in its natural state; (b) it should be maintained as a preserve for all forms of plant and animal life; (c) no product of the land is to be removed, as, for example, timber, forage and game, save where an overpopulation of animals occurs; (d) periodic reports of stewardship; (e) if the 'watch dog' organization can not maintain these policies, as shown by its report, then the reverter clause should be exercised; (f) use of the tract may be permitted through appropriate regulations for educational and scientific activities, not interfering with the preservation of a natural area. These are simple regulations which could be modified to fit the individual case.

4. Protection from vandalism, fire and insects.

5. Set up regulations for public use: This depends on the degree of scientific use, and whether public use will interfere with this. Certain parts of the preserve may be open to public use,

while other parts should be preserved for very light use. This can be done by establishing trails which will keep the public away from the light use areas.

HOW TO FORM A LAND ACQUISITION AND PRESERVATION ORGANIZATION

An individual interested in the preservation of a certain natural area, or in the idea of preserving areas in general, has a difficult task pursueing his goals. Even if he owns the land and makes provisions in his will for its perpetual preservation, there has to be a "watch-dog" trust or agency to assure that future generations are aware of and respect his wishes.

To influence other people and especially legislative and administrative decisions, individual voices are not enough, they are heard only when they join together. Where no such organization exists, a person concerned with land preservation can use his energy and enthusiasm most efficiently by taking the initiative and starting a land acquisition and preservation organization.

The first step is to seek potential members and leaders. This can be done by observing and analyzing the members of other groups to which the interested individual belongs. Such groups are the family, school, office, club or any kind of organization. The members of these groups are united by common interests and friendship, and some of them, when correctly approached, may also become interested in the preservation of natural areas. It is essential to find somebody who can become a leader. Obviously not all who are concerned with conservation problems possess the qualities of leadership, but they may help to recognize such qualities in others.

The "training" of leaders can be accomplished by persons who have practical experience in the establishment of organizations, or at least who can establish contacts with similar organizations in other countries.

Once an able leader or leaders are committed to the cause, they will take the initiative for the legal establishment of the group, help to develop projects and find practical solutions to all land acquisition plans. They will also attract other persons who may be interested in the organization itself or its projects but do not have the time or talent to take a leading role. The leader has to convince all members that each person can promote an idea and participate in the growth of the organization.

When busy people are approached, it has to be made clear to them from the start that they are not expected to attend all meetings but that their help in critical revisions of plans and documents will be appreciated. In this respect it is especially advantageous to achieve the cooperation of executives from other organizations, such as universities, banks, law firms, etc.

It is advisable to start with projects which are not too costly, relatively small, and to do them well. When the idea has proved itself on a small project there will be an interested group and the projects can become more ambitious.

When using the press to publicize efforts, different types of sections in the newspapers can be utilized. The society page to describe who is involved; news page story and day to day event columns to bring news on fund raising, visitors to the area being protected, inauguration, etc. Editorials carry the story, purpose of the project and its effect upon the community. The support of the entire community should be sought.

THE NATURE CONSERVANCY BYLAWS

(See Annex D)

ADAPTION OF BYLAWS.

The bylaws presented on Annex D were worked out for The Nature Conservancy in the United States and have to be adapted according to the legislation of each country where it is planned to set up an organization similar to The Nature Conservancy of the U.S.A. It is especially important to keep the bylaws practical. To avoid misunderstandings with other organizations and stress the single purpose of the planned land acquisition and preservation organization, objectives can be reduced to those listed in sections a, b, and f of Article II of The Nature Conservancy Bylaws.

Bylaws can be further modified. For example, the number of the members of the executive committee can be reduced to assure an easy assembly of the members. Or in the absence of quorom at any duly called meeting, an adjournment can be decided on; but if no quorum is reached at three consecutive meetings any number present in the third duly called meeting should constitute a quorum.

Due to the changing value of currencies it is not convenient to mention definite amounts for membership dues; instead of using dollar values, the bylaws could provide "A certain amount per year as established by the Board of Governors for the general purposes of The Nature Conservancy..."

BOARD OF GOVERNORS

Members of the Board of Governors are elected from the most enthusiastic and distinguished members of any given organization. The list of their names are the group's introduction to prospective donors, banks where money transactions take place, the press, and other publicity media.

They should represent a vast range of talents, such as scientists, business men, lawyers, bankers, writers, and so on. Such a variety of working talents is especially needed when the land acquisition and preservation organization is new and small, and free assistance is essential.

The Board obviously must devote itself more to establishing and guiding policy matters than to administration. The Governors act always as a group and not as individuals. Naturally, individual Governors can and should be assigned to specific tasks by the Board or the administrative office. Such assignments however should be spelled out and the individual governor should know to whom he reports.

ADMINISTRATIVE OFFICE

THE BEGINNING.

At the time of the formation of an organization patterned after The Nature Conservancy of the U.S.A., the administrative office should be kept as small and inexpensive as possible. The Chairman of the Board and members of the Executive Committee can handle the work on a voluntary basis. To cope with correspondence a part time secretary can be hired. Suitable candidates for secretarial jobs can be found among university students (especially biology and geography majors); retired administrative personnel, and wives and other relatives of members of the Board. It is essential that either the secretary or a readily available member of the Board should be knowledgeable in book keeping.

THE ORGANIZATION GROWS.

When the number of projects surpasses 25 per year and the membership has reached over 1000, a permanent staff can be hired. The Board appoints an Executive Secretary or Director. This person has to be a carefully chosen nature lover with considerable administrative capabilities to be able to do justice to his demanding office.

When the working load of the Director has grown to such an extent that he can no longer handle it alone, he is justified in asking the Board to approve the appointment of one or several field representatives. In a large country it may be advisable to establish regional offices in areas where intensive activity takes place.

Every new appointment has to be considered carefully because the main reason to establish organizations patterned after The Nature Conservancy of the U.S.A. is to promote land acquisition and not to build up a big office per se.

When the membership surpasses 5,000, the concluded land acquisition projects one hundred and fifty and the financial assets amount to one million U.S. Dollars, the time has come to build an office with specialized, skilled personnel capable of handling land evaluation and management, the legal and financial transactions and the promotion necessary to comply with the aims and constant growth of the organization.

METHODS OF OPERATION.

The Nature Conservancy of the U.S.A. operates in the following manner:

1. By acquiring land through gift, or purchase. It acts through local groups, including its own chapters and project committees, as well as non-related organizations. Among its services, it offers advice and loans from its Revolving Loan Fund.

2. By assisting governmental agencies in their natural area acquisition programs. Because it is a private organization, it can often act with greater flexibility and speed and hence economy, than the agencies themselves. It makes a policy of recovering its direct costs, and also hopes to recover whenever possible all expenses incurred in its transactions.

3. By providing a central source of information on land preservation, including scientific surveys, evaluation and projects and legal experiences in the field, and on methods of developing programs for scientific and educational use.

4. By acting as a catalyst in coordinating the efforts of agencies interested in land preservation.

5. By providing a "watch-dog" service that encourages donors to give land to other agencies with The Nature Conservancy in a position to defend the donor's wishes, and protects natural area provisions on properties transferred to other agencies by The Nature Conservancy and on properties protected by conservation easements and covenants.

RIGHTS AND DUTIES OF MEMBERS

Members are eligible to vote, hold office, and to participate in determining matters of policy. They are entitled to the publications of the organization and are informed of its progress and activities. They help in the following ways:

1. Assist their organization to acquire and protect natural areas through membership and contributions.

2. Advise the officers of The Nature Conservancy when they know of an outstanding natural area that should be preserved.

3. Notify The Nature Conservancy whenever any proposed action or operation (road building, clearing, drainage, logging, grazing, etc.) imperils a preserve or other natural region that should be safeguarded.

4. Stimulate other persons and organizations to act on natural area programs.

5. Encourage schools to maintain small natural areas so that all children may have the benefit of first hand natural experiences.

MEMBERSHIP UNITS

The Nature Conservancy of the U.S.A. encourages local initiative, as this is the best way to accomplish its purpose. Work is centered around projects and the support should come largely from within the local community or state, although technical assistance and advice are supplied by the administrative office.

All units of The Nature Conservancy of the U.S.A. are part of The Nature Conservancy; they derive their authority to exist and act from the Board of Governors.

The genesis of Conservancy action within a state or region should be an official representative, designated annually by the national office. This individual should be an acknowledged and respected conservation leader or spokesman with sufficient interest and time to be active. He should be asked to forward information regularly to the national office on current issues and activities, act as a local spokesman for the Conservancy when authorized, promote a favorable attitude towards its objectives on the part of local officials and the general public, and encourage the formation of project (action) committees for specific land saving projects.

Project committees should consist of local individuals acting under proper authorization, who would serve on an ad hoc basis to accomplish a particular action. There should be vigorous and responsible leadership, broad representation of community interests, and active guidance by at least one competent volunteer. The responsibilities of a project committee should be to acquire or protect a specific tract of land, raise and expend funds for such purposes through the national office, receive and repay loans, manage and maintain the properties acquired.

Chapters should be authorized by the national office when the following conditions appear to exist: (1) A number of active project commities have been in existence over a period of years; (2) guidance of a regional nature is needed to coordinate land conservation activities properly; (3) sufficient local interest exists for this step including the prospect of consistent revenue.

Under normal circumstances, a membership of approximately one hundred persons and a record of activity of not less than one new project each year, or two new projects within the most recent two year period, are required to qualify for chapter status.

Chapters would be characterized by a charter, bylaws and officers and a local treasury for routine operating expenditures and receipts. The chapter would speak for the organization when so authorized and would normally function as the primary outlet for the Conservancy activity in its particular area.

The responsibilities of a chapter would be to encourage and coordinate local project committees, raise state-wide or regional project funds, promote state-wide or regional Conservancy activities, and develop comprehensive surveys of natural areas within its jurisdiction.

FINANCING THE PROGRAM

OPERATING FUNDS.

The operating funds of The Nature Conservancy in the U.S.A. are derived from the following sources: 1) Dues and unrestricted contributions, 2) special gifts for national operations, 3) Income from endowment and 4) miscellaneous revenues.

THE REVOLVING LOAN FUND.

This fund, also called the Matching and Loan Fund, was initiated in 1954. Its purpose is to aid the financing of land purchases until local project committees can raise the funds required. Loans have been made to the U.S.A. Nature Conservancy project committees with nominal interest and to independent groups on a prearranged basis, mostly 5%. It is being recommended that 2% interest be charged to The Nature Conservancy groups after the first year as a stimulus to more active fund-raising activity.

This fund has been highly successful in encouraging groups to undertake new projects and has had a very good record of repayment to date. It has also enabled the national staff of the Nature Conservancy of the U.S.A. to initiate a cooperative program of land acquisition with various government agencies, notably the U.S. Forest Service.

FUND RAISING

Fund raising operations should consist of a well organized campaign to finance a stated program. Before the campaign starts, its leadership must be selected. All volunteer solicitors should be well informed about the cause, time schedules, and deadlines.

Meetings of campaign workers are essential to maintain them fully informed of the development of the campaign as well as to exchange among themselves information about their particular experiences, difficulties, or successes. The workers should also prepare written reports about their field experiences to insure that campaign techniques are constantly evaluated and improved.

Soliciting can be done personally or by mail. In both cases, campaign literature must be prepared before hand. When editing the text, it must be remembered that people are more willing to contribute to promising campaigns than to needy institutions. A subscription blank or pledge card should be attached to each appeal.

Printed acknowledgements or a form letter for the signature of the campaign leader should be ready when the soliciting starts. Personal, rather than form letters, should be sent to all major donors. It is also good practice to send subsequent reports to donors and their families on what has been accomplished as a result of their generosity.

Listed below are some simple but very important principles which must be taken into consideration during fund raising campaigns.

Appeals should be concrete and fully stated, donors like to know exactly what is being done with their money. Appeals should be presented as attractively as possible. The use of photographs of plants and animals of the region being saved, for instance, is a requirement. In some cases, a promotional gimmick can be most useful. In a campaign to save the Quetzal, for example, Mrs. Lovie Whitaker and members of the Cleveland County Bird Club Quetzal-Cloud-Forest Committee obtained a miniature quetzal replica made of beeswax and chicken feathers. Through the sale of the "quetzalitos" the Club's Quetzal Fund grew by almost 800.00 U.S. Dollars. All appeal presentations should be kept as simple and straightforward as possible.

Many persons like their donations to be in the form of memorials. It may be suggested to the donor that the reserve, or part of it, might be named after a member of the family of the donor.

Campaign workers should be persistent and never discouraged by the first negative answer. Persistently and very tactfully, the worker's first task is to present the need and opportunity for cooperation in a worthy project. He should make clear to the donor that he does not expect an inmediate answer but unhurried and sympathetic consideration. The appeal must always be made to suit the interests of the donor and not of the campaign worker or of his organization.

The preservation and conservation of nature and its resources is an urgent and worthy cause. Campaign workers must not be apologetic nor must they beg in behalf of their goals, they must at

all times maintain their self-respect and an optimistic outlook. Once it appears a contribution is forthcoming, the campaign worker must do all he can to insure that the donor becomes personally involved in the project and the land saving organization. In fact, the donor must become a campaign worker.

COOPERATION WITH RELATED ORGANIZATIONS

INTRODUCTION.

In all countries of the world organizations are formed by people concerned with one or several aspects of conservation. In some there are only one or two groups, in others a vast array. In the United States of America, for example, there are many indeed. The National Wildlife Federation publishes a yearly Conservation Directory listing all state and federal agencies responsible for conservation issues. Another part of the Directory lists data on approximately 360 private groups which range from the Brotherhood of the Jungle Cock (a group whose stated purpose is "To teach youth the true meaning of conservation"), to the Garden Club of America (which wants to "Translate the principles of conservation into personal action").

Most conservation organizations discuss and promote a better understanding of conservation principles. Where land saving is involved, however, they usually limit themselves to pointing out the way for possible action. An ornithological society, for example, might find that the draining of a swamp endangers the nesting and resting ground of certain species and recommend that the draining be stopped and that the area be permanently protected in its present state. Usually, such groups are not organized for the practical follow up of their recommendations. This is when a land acquisition and preservation organization, similar to The Nature Conservancy of the United States, steps in to make the necessary arrangements to acquire the land, stop the draining, and permanently safeguard the area in its natural state.

In the following paragraphs are listed the possibilities for cooperation among land saving organizations and other established groups, some of which are not even specifically oriented towards nature conservation but which may become involved in such programs.

CONSERVATION FOUNDATIONS, CONSERVATION ASSOCIATIONS.

Objectives.

Conservation organizations are concerned with the various aspects of wise use (including in some cases preservation) of renewable natural resources. They sponsor research, develop information programs, organize round table discussions and symposia, and maintain the public's and the government's awareness of conservation

problems to which they often offer well documented solutions.

Opportunities for cooperation.

Such societies are generally not organized to solve the specific and intricate problems of land acquisition; They can, however, point out the advantages of safeguarding certain areas and cooperate with organizations similar to The Nature Conservancy in the U.S.A. They may play an important role by providing scientific surveys of the area, contributing funds and prestigiously promoting public and governmental interest in land saving projects.

SCHOOLS, COLLEGES AND UNIVERSITIES.

Objectives.

These institutions are concerned with accumulating and disseminating knowledge and with preparing students for advanced studies and professions. Promoting, training for and completing research work are paramount activities in schools for higher education.

Opportunities for cooperation.

Ecology, conservation, natural sciences, especially systematics, con not be taught adequately without outdoor laboratories; therefore, both natural and experimental areas are indispensable facilities of well equipped schools.

Even as recently as a few decades ago science teachers could easily take their students to an appropriate natural area somewhere near the school or to an area which was relatively undisturbed. Such areas, however, are rapidly disappearing, and therefore there is a need for the schools to secure ownership of appropriate natural or undeveloped areas. In 1963, some one hundred colleges of the United States owned tracts of land which could be called natural. In many cases, The Nature Conservancy of the U.S.A. has actively been involved in acquiring the natural areas for these schools. Several universities in the U.S.A. have helped to set up statewide systems to protect camples of the ecological diversity of the state, the University of California's Natural Land and Water Reserves System is one of these.

MUSEUMS, BOTANICAL GARDENS, ZOOS.

Objectives.

Museums house collections of adequately prepared material which can be studied by scientists; part of the collections are displayed in attractive show cases to inform laymen. Museums are frequently linked to institutions and play a continuously increasing role in education. Most of them aim to reach all age groups from kindergarten students to adults.

Collections of live plants are displayed in botanical gardens

and arboretums, and in those places serve a similar function to their preserved counterparts, the animals housed in zoological parks.

Opportunities for cooperation.

There is an obvious interrelationship between the stored collections of the once living things of the museums, live animals and plants displayed in the artificial environment of zoos and botanical gardens, and the "living museums" where the entire ecosystem is preserved. The Nature Conservancy of the U.S.A. has often been stimulated and assisted by museums to preserve natural areas. In Latin America, several botanical gardens include unmodified areas of the region; for example, the Hortus Amazonicus Tropicalis Boliviensis, in Santa Cruz, Bolivia. In Colombia the Museum in Cali is in close contact with the Colombian Association for the Conservation of Nature and was materially involved in saving the remnant forest of El Guayabo.

FORESTERS ASSOCIATIONS, FRIENDS OF TREES, ETC.

Objectives.

The objectives of such organizations are to meet the essentials of forest protection, including the control of fire, insects and diseases, to improve the national timber crop in volume and quality or to encourage the adoption of tree farming practices by school children and adults. Forest conservation and educational organizations are supported by professional foresters, forest industries and/or private citizens.

Since remote times, foresters have been deeply involved in conservation activities which include also the protection and management of the streams and lakes of the forested area and the wildlife which inhabits them.

Opportunities for cooperation.

Forest oriented organizations can promote the principle and necessity of saving sample areas of all forest types on a national level as well as to maintain samples of the original forests near settlements, universities and schools.

Such organizations can identify a remnant forest, a remarkable tree grove, or other important and interesting areas which should be saved. Organizations similar to The Nature Conservancy in the U.S.A. can then follow up by acquiring the land.

Forest related organizations should also be made aware that indiscriminate afforestation of all areas, and planting trees along all highways is not a desirable goal. For example, Norwegian foresters suggested leaving sample areas of the original Moor, rather than draining and fertilizing the entire region for afforestation. In South America samples of the Paramo were saved following the

intiative of foresters. In many cases The Nature Conservancy type organizations were in charge of the actual land saving process and later served as "watch-dog" organizations.

SOIL CONSERVATION ORGANIZATIONS.

Objectives.

The objective of "The Friends of The Soil" and similar organizations is to promote proper land use, especially erosion control. In many cases they also promote conservation in a broader sense including watershed management, woodland conservation, development of wildlife habitat and recreation areas.

Opportunities for cooperation.

These societies can be made aware of the necessity to include in all land development programs the saving of samples of the original ecosystem. Organizations similar to the U.S. Nature Conservancy then are in a position to follow up the suggestions and take care of the actual land acquisition and its permanent preservation.

GARDEN CLUBS.

Objectives.

A usual objective of garden clubs is to provide a forum for those interested in different aspects of gardening and conservation at large.

Opportunities for cooperation.

Phil Clark wrote in the Mexico "News" (August 13, 1967):

> "There is a deep relationship between gardening and conservation. If you enjoy gardening, you will easily see the need for conservation of the wild beauty from which your enthusiasm developed. If you appreciate the importance of conserving some of the wild "garden" you have but to pick up a trowel to become a garden hobbyist."

Based on this understanding and love of nature, members of Garden Clubs can easily be enlisted to cooperate with landsaving organizations in locating interesting areas, fund raising, local project committees, and also in serving as managers of preserved areas.

SOCIETIES FOR ORCHIDOLOGISTS, COLLECTORS OF SUCCULENT PLANTS, ETC.

Objectives.

The interest of such societies centers around a particular group of plants.

Opportunities for cooperation.

It is evident that the groups should and can be interested in contributing to the safeguarding of the natural habitats of all species with which they are concerned. The Latin American Orchid Society, for example, is encouraging the establishment of living museums for all wildgrowing orchids.

Members of such groups are in an excellent position to point out representative areas which should be saved and also to promote fund raising for such purposes.

The land acquisition itself and the preservation of the area can be effectively done by an organization similar to The Nature Conservancy of the U.S.A. since it has the suitable mechanisms to handle the problem.

ORNITHOLOGICAL SOCIETIES, BIRD WATCHER CLUBS, ETC.

Objectives.

The objectives of such organizations are the advancement of ornithology, the protection and enjoyment of wild birdlife, the organization of meetings, studies, tours, and nature walks to observe the birds.

Opportunities for cooperation.

These societies and all their members are avidly interested in maintaining the natural areas the birds need for nesting and resting grounds. In many countries they seek cooperation with The Nature Conservancy type organizations to acquire and protect natural areas. Because of the ornithologist's great concern for migratory birds, they are in an excellent position to encourage national land saving organizations of various countries to cooperate with each other so as to assure the permanent protection of resting grounds along the fly-ways.

SPORT FISHERIES, FISHING CLUBS.

Objectives.

The objectives of these organizations include the improvement of sport fishing through fish conservation research, education and services. They also assist anglers by disseminating pertinent data on fish and their habitat.

Opportunities for cooperation.

Most members of fishing clubs are outdoors men and appreciate wilderness areas. A land acquisition and preservation organization can enlist their help in saving natural areas on lakeshores and

along wild rivers. It is also important to explain to all those who enjoy fishing that some areas have to be left completely undisturbed, to assure the natural replenishment of rivers.

A very common practice among such groups is to promote the stocking of lakes and rivers with introduced species. The danger of such practices, if applied universally, can easily be pointed out on the evidence of the past. For example, the introduced bass in Lake Atitlan (Guatemala)has outcrowded the original fauna. The reestablishment of the original ecosytem and especially of the grebe takes much time and effort on the part of governmental agencies and private conservationists. It is up to the members of The Nature Conservancy to point out these difficulties and seek the help of those interested in fishing to maintain entire watersheds and lakes unaltered.

SAFARIES, HUNTING, AND GAME CLUBS.

Objectives.

The objectives of those interested in hunting are to maintain an adequate game supply for their hunting pleasure, to promote surveys to collect and tabulate information on the game population, to establish measures which make a sustained yield management of the game possible, to encourage the conservation and preservation of the wildlife in general, and render services to hunters.

Opportunities for cooperation.

Hunters have first hand knowledge of where and how the game declines in mumbers and how restricted, in general, the wildlife habitats become. They therefore are valuable allies to land acquisition and preservation. Good hunters know that completely protected natural areas can serve as breeding grounds for wildlife and that it is from such areas that the game disperses and replenishes the hunting grounds. Members of hunting clubs frequently contribute to establishing wildlife refuges.

Good communication with these groups is also needed to make them aware of the dangers of introducing exotic animals to a new habitat. Damage and economic losses caused by the rabbits in Australia and the red deer in Argentina are too well known examples to make repetition elsewhere justifiable.

MOUNTAINEERS, SKIERS AND OTHER SPORT ORGANIZATIONS.

Objectives.

The objectives of such organizations include wilderness outings, white water trips, skiing, mountaineering, riding and often activities which lead to the exploration, enjoyment and protection of scenic resources.

Opportunities for cooperation.

While such organizations are not set up for land ownership, at the most they maintain huts and lodges, they willingly cooperate with land acquisition and preservation organizations by calling to their attention especially significant areas. They might also participate in the work of project committees, and the protection of nature sanctuaries.

Good communication with sportsmen is needed to discuss why certain areas have to remain undisturbed and how ski-lifts, bridle paths, the feeding of horses, fuel pollution of motor boats, and mass visitations can perturb, and impair wilderness areas. When sportsmen have an exact knowledge about which areas can be considered as mainly sport and recreation areas (where a variety of facilities and motorized vehicles are permitted) and which areas are to be perpetuated in their natural state, they are good sports about it and help to safeguard the latter. The Andinist Club of Ecuador has urged the government to declare the mountain peaks over 15,000 feet (4,500 meters) and their access roads as public domain. As a consequence many high mountain forests and interesting parts of the Paramo were safeguarded from exploitation or agricultural development.

SCOUTS, TRAILFINDERS, HIKING CLUBS, ETC.

Objectives.

Their objectives are to educate in the science and arts pertaining to life outdoors, including, among other pursuits, the conservation and preservation of natural resources.

Opportunities for cooperation.

Their interests frequently overlap with those of land saving organizations. A Nature Conservancy type organization might provide areas necessary for the activities of the groups; on the other hand, the group might point out interesting areas, and when they are acquired, actively contribute to their management and protection. The Appalachian Trail in the U.S.A. is maintained by voluntary workers. Scouts in many countries keep watch on nature preserves, help where necessary in clean-up operations, and prevent vandalism by other groups.

HISTORICAL SOCIETIES AND TRUSTS.

Objectives.

Such societies aim to promote the veneration of the nation's heroes and the location of historical events. The societies and trusts inspire and promote the restoration of historically significant buildings, the placement of commemorative plaques and monuments.

Opportunities for cooperation.

Even though historical societies might sometimes protect a tree under which a general has rested, or maintain a battlefield in its natural state, the preservation of natural areas is obviously not among the aims of historical societies. It is however most rewarding for The Nature Conservancy type organizations to seek close cooperation with such groups. If the areas around the historical monuments can be protected, a double goal is reached. First of all, the original apsect of the landscape in which the historic event took place can be maintained and future generations can more easily appreciate it; but also an area which was only little modified by man can in this way be permanently safeguarded.

Historical societies can also be asked to promote in schools and among their members the concept that natural areas are of patriotic value and that they form part of the nation's natural heritage. Wilderness areas are samples to show the landscape, animals and plants which our pioneer forefathers found when they came to colonize the land. The original landscape with its flora and fauna is the most characteristic feature of each country. It is unique and different from what can be found in any other part of the world.

Historical societies can be asked to serve as caretakers and managers of natural areas related to historically significant places.

ARCHEOLOGICAL AND PALAENTOLOGICAL SOCIETIES.

Objectives.

Such societies promote the scientific study of material remains such as fossils, relics, artefacts, monuments, etc., of past life and activities. They encourage the proper preservation, presentation and enjoyment of ancient cultures and biotic forms.

Opportunities for cooperation.

Animal and plant relics, such as petrified forests or dinosaur bones give clues to the history of past natural environments. Pre-Colombian cultures in the Western hemisphere and archeological treasures in general constitute a most important part of a nation's cultural heritage. The reconstruction of the original landscape around archeological monuments and the acquisition of considerable open space around significant areas presents the opportunity for cooperation with The Nature Conservancy type organizations.

INTERNATIONAL HELP - WHEN AND WHERE

INTERNATIONAL AGENCIES CONCERNED WITH NATURAL AREA PRESERVATION

The following summary shows the objectives and activities of international agencies concerned with natural area preservation.

Association for Tropical Biology (A.T.B.) Through its Preservation and Conservation Committee the A.T.B. promotes and encourages the establishment of preserves and wildlife refuges in tropical countries.

Food and Agriculture Organization (F.A.O.) Several programs of the F.A.O., a United Nations organization, promote natural area preservation through their work in genetics, forestry, and wildlife management.

FORESTA Institute for Ocean and Mountain Studies has an office for Latin American Natural Area Programs which promotes the preservation of natural areas.

International Biological Programme (I.B.P.) Through its section on Conservation of Terrestrial Communities (C.T.), the I.B.P. is concerned with the establishment of a comprehensive international system of scientific areas representing both natural and semi natural environments. Sections on Productivity of Fresh-Water Communities (P.F.) and Productivity of Marine Communities (P.M.) are concerned with preservation of aquatic ecosystems. In the I.B.P. program of the United States all preservation activities are allocated to the section Conservation of Ecosystems (C.E.)

International Council for Bird Preservation (I.C.B.P.) This organization emphasizes the need for protection of nesting and resting habitats of bird species.

International Hydrological Decade(I.H.D.) Although mostly concerned with the coordination of studies on hydrological phenomena throughout the world, the I.H.D. is also interested in the designation of representative basins where hydrological cycles can be studied.

International Union for the Conservation of Nature and Natural Resources (I.U.C.N.) The main objectives of the I.U.C.N. are to promote preservation of wild species and all renewable natural resources through the application of biological knowledge.

Organization of American States(O.A.S.)

1. Through the Interamerican Travel Congresses and the Pan American Highway Congresses many recommendations have been made relevant to preservation and conservation of renewable natural resources.

2. The Pan American Union, as depository of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, is the guardian of nature in the Western hemisphere.

Pacific Science Association (P.S.A.) The standing committee on Conservation of P.S.A. gives special attention to the establishment and maintenance of national parks and equivalent reserves in the Pacific Area.

Scientific Committee on Antarctic Research (S.C.A.R.) This organization has agreed to many measures which tend to preserve the natural ecosytems in Antarctica.

Societas Internationalis Limnologiae (S.I.L.) Under Project Agua S.I.L. has prepared a list of internationally important aquatic areas which should be preserved.

United Nations Educational, Scientific and Cultural Organization (U.N.E.S.C.O.) Many international conservation activities, including ecological research and training institutes, are sponsored by U.N.E.S.C.O. The International Advisory Committee on Humid Tropical Research has repeatedly emphasized the urgency of preservation of adequate natural areas for research on tropical ecological problems.

World Widlife Fund (W.W.F.) This private non-profit organization is dedicated to the preservation of endangered species of flora and fauna. Through its resolutions and financial assistance it aids the preservation of natural areas, wildlife refuges, national parks and equivalent reserves.

SECURING AND MAINTAINING PUBLIC UNDERSTANDING.

Many of the above mentioned international organizations are interested in the establishment of a world network of natural areas. Their recommendations and manifestos have stimulated responsible citizen groups and governmental agencies to create national parks or equivalent reserves where such did not previously exist, or further the development of already existing park systems. In most cases the expression "National Park and Equivalent Reserves" refers to the natural area concept on which the creation of Yellowstone National Park was based; although sometimes misleading interpretations of the term are also used.

International agencies and experts thus play a significant role in the process of identification and preparation of projects. This helps to establish phase one of the land preservation program. Namely, securing and maintaining awareness and public understanding. International help, however, is only valuable when there is a clear understanding of purpose and when all reports are prepared in a conscientious scholarly manner. For a variety of reasons, visiting scientists are not always able to work as conscientiously as they would in their own country and therefore their reports cannot always be used as tools to initiate an action program. The effectiveness of international cooperation also greatly depends on the contact persons on both sides .

There is an inherent danger of responsibility without authority. Nobody can do a thorough job who has no ways and means to implement and make his orders respected. Utilizing this argument for our purpose, it means that visiting conservationists should find out how and where a natural area program fits into the constitutional framework of the country.

Much energy and good opportunities are being lost by seeking out as counterparts individuals or groups who, though interested and willing to cooperate in international programs, lack the prestige and/or power to implement them in their own countries. It is also useful to state quite clearly what authority the visitor has to promise cooperation and what else besides general encouragement he or the organization he represents can, or is willing to give. To use an absurd example, statements such as "My organization has a capital of 1,000.000 U.S. Dollars. We would welcome the establishment of a reserve for a vanishing species which is endemic in your country," might lead, and have led those to whom the expert spoke, into believing that his organization will provide some funds for help to establish the reserve.

We should also recall another meaning of the word "authority" and mention the deplorable fact that often well meaning nature lovers represent international conservation organizations, and their lack of professional training linked to a somewhat superficial knowledge of the ecological and social conditions of the country they are visiting, has caused much embarrassment. After they have aroused interest, they are not prepared to answer questions and give practical advice for the execution of a plan they started. Until they receive from headquarters further instructions or pamphlets, the enthusiasm of their audience might be lost or channelled into the wrong direction.

DE FACTO LAND SAVING.

Local and visiting conservationists, amateurs or experts, all play and should play an important role in the process of de facto land saving. International agencies can help to point out the value of areas which should be preserved, give encouragement and guidance to national groups and provide the necessary means to finance certain projects. But it should be kept in mind that the lands which are being saved belong to the people of a country whose sovereignity and laws should be respected. However, the ultimate success of a land saving campaign rests on the work of a national organization. International agencies can only give guidance, technical and financial aid.

If help is needed the request to the international agency should be done in an adequate form. For such purposes most agencies have special formularies which can be obtained from their secretariats. A complete well documented case-history should accompany each petition, with an exact statement of what kind of cooperation is needed.

Letters from"lone-wolves"to international conservation agencies soliciting them to intervene in a certain problem succeed at best only in starting lengthy correspondence. The petition should be made by a national organization and must present the exact description of the problem, including what steps have been taken to solve it, who has participated in them, and describing what the agency could do. The request can then be acted upon without delay by the international agency.

The most usual requests ask the international agency to a) write a letter to a governmental agency and state the international significance of an area which the local group wishes to preserve; thus giving the request more prestige; b) send an expert to help the national groups in the necessary scientific surveys on which land preservation can be based or advise them about the establishment of local conservation organizations; c) funds for the de facto land saving. In the last case an exact evaluation of the land should be given. It is most important to assure the prospective donor not only that the funds are going to be spent on the purchase of the land, but also that the land is going to be preserved in the future. From the donor's point of view, it is especially reassuring if a local land acquisition and preservation organization does the transaction and gives the purchased tract with a reverter clause to the governmental or private organization which is going to be in charge of the land.

Often it seems cumbersome to look for a mediator but this is necessary. For example, when faculty members of a University become interested in a natural area and directly contact an international agency or a conservation group to help them in their purchase, they are often turned down. Not because their request has no merit, but because in many cases the universities have changed their policies on land holding and have utilized valuable natural areas for sports fields or development. The watch dog attitude of an organization similar to The Nature Conservancy of the U.S.A. provides the necessary reassurance for the future.

The need of private-non profit land acquisition and preservation organizations is shown by their rapid acceptance by both the public and the governments of countries where conservation comes into the limelight. It is also of great political value to a secretary of agriculture or the head of an agrarian reform institute to be asked by a national organization (representing a group of voters) to save an area which can become the first national park or equivalent reserve in that country.

Such a national achievement of international significance could be utterly spoiled if outsiders appear to claim the credit for inspiring the event. When financial help is given for some actual land saving project in a foreign country, it should be done with biblical modesty. Let the donor first truthfully consider if he wants to help to preserve a valuable natural area or if he wants credit for international cooperation. These are two basically

different aspects and further action in the field of preservation is often discouraged in many countries because of the presumptuous behavior of credit cravers.

An embarrassing situation may also occur when visiting conservationists voice and support different points of view in land-saving projects. For example, through the splendid and well organized cooperation of some fifteen conservation groups from all over the world, it was possible to raise 20,000 U.S. dollars and help a Latin American government complete the purchase of an area with representative autocthonous wildlife and establish a 3,000 acre Nature Reserve. Obviously there were also other areas in the country worth saving and native and visiting scientists were anxious to do so. Each group believed that its area was the best, but instead of trying to raise funds and save it too, they tried to persuade the donors of the $20,000 to donate the money to their project. After the agreement with the government was signed, they denounced it nationally and internationally as a failure. Such disagreement among scientists discourages patrons of internationally financed land saving projects.

As an example of an entirely satisfactory case of international cooperation, we can mention the saving of a remnant forest through the offices of an international conservation organization to whom an anonymous donor gave 2,500 U.S. dollars for a newly formed organization similar to The Nature Conservancy in the U.S.A. With this amount they purchased 55 acres of land. Because of the educational publicity involved in the proceedings, a community project developed and the landholding was doubled. Write-ups in the local and national press spread the idea over the country and within a year five other areas were saved without any external help.

PERPETUAL PROTECTION AND MANAGEMENT OF THE AREA.

Legal provisions for the perpetual protection and management of an area must be established in the most clear cut terms. All attempts to interfere with, or change the status of the area have to be forestalled. The reverter clause is a valuable tool to keep lands from being used for other purposes than those intended. This clause, which is written into most agreements of The Nature Conservancy in the U.S.A.when land is turned over to governmental agencies, or cooperating local groups for maintenance, provides that unless the present conditions continue to be fulfilled, the land reverts to The Nature Conservancy. Thus once an area is acquired, it may not be modified in any way.

Laws alone are not enough, they have to be known, voluntarily respected and enforced. At a recent meeting, a Mexican delegate suggested that universities and travel agencies should provide those who plan to visit foreign countries with their conservation laws. Several nations possess legally established national parks or equivalent reserves but these are not yet protected by warden systems. It is most unfortunate to observe in such areas professional collectors at work and foreign tourists fishing and

hunting. Apart from the violation of laws and the actual damaging of the ecosystem, such abuse of a protected habitat sets a bad example for the natives of the country. A most useful international cooperation can be achieved if visitors not only respect legally established reserves, but also areas which are considered worth saving. Thus their international significance and importance can be well proven.

We cannot stress too strongly the urge of people and agencies to imitate successful leaders. Those who pattern their policies after foreign models do not always take time to analyze carefully what they are imitating. They look at the effects rather than at the causes and thus get involved in unexpected problems. For example, a paper published in an European country about an area where, under strong surveillance and the exclusion of the public, the natural vegetation recuperated and became replenished with wildlife. The lands belonged to the Atomic Commission and now some other European and extracontinental conservation groups promote the idea of linking together natural area preservation with atomic commissions.

How dangerous such paralogisms are where fringe benefits are taken for granted and constant, can be illustrated by another example. An island in a major South American river is ecologically interesting because three different habitats meet there. Some thirty years ago a group of biologists made efforts to have the area declared a national park or reserve but the motion was considered superfluous since the island was well protected by the Navy. The cooperation of the Navy went so far as to provide transportation for visiting scientists and students; they also prepared attractive and educational posters describing the three vegetation types. Naturally the scientific research and visits had to be suspended when it interfered with the naval activities. One day it was decided to enlarge the local air field. Plans were made to clear cut most of the forest and a unique stand of cacti. Scientific organizations became alarmed and concerned; they began to seek the help of congressmen and asked for the intervention of international agencies but their requests had no legal standing. It is not to the point what happened to the land. The important lesson the conservation groups of the country received was not to be satisfied with being allowed to use an area which is set aside for other purposes and never to overestimate the cooperation of others.

If an area is worth saving, all necessary steps for its perpetual protection have to be taken immediately.

CASE HISTORIES

INTRODUCTION.

In the following paragraphs some case histories of land saving are described. A variety of approaches was selected. They display a spectrum of involvement ranging from enterprises where the land appraisal, acquisition and provisions for perpetual safe-guarding were all accomplished through the enthusiastic work of one individual, to projects where the interaction of many private and governmental agencies was needed to materialize the plan.

Showing these examples of effective land saving might inspire interested individuals of a variety of backgrounds and talents how to use their skills in helping to perpetuate natural areas.

A YOUNG GIRL SAVES A FOREST.

Over forty years ago, a young girl, Miss Janet Everest (later Mrs. Raymond Bentley), learned that a beautiful grove of trees near her home was to be cut. She purchased the woodland to save it from destruction. In order to insure its permanent preservation, she offered to donate the 22 acre area to The Nature Conservancy of the U.S.A. in January 1963.

The reserve is off the highways with access only across other property although there is a right of way. About half is a spring-fed marshy area draining into Irondequiot Creek which flows through one corner of the property. This part supports a number of mature pines and hemlocks. These trees are surrounded by a dense stand of hemlock of the eight to sixteen inch diameter class. A luxuriant ground cover of moss, ferns and other moisture-shade loving plants are among other components of this environment.

The other half of the tract is on higher ground and was doubtlessly farmed at one time, although not within the past sixty years. Here white and red oak, elm, ash, and maples predominate. Thus two distinctly different forest types are to be found in close proximity.

A committee of local persons interested in the woods has accepted supervisory resp..sibility. That responsibility might entail some control as it is important to prevent extensive use of marshy areas when such use compacts the soil. Therefore the committee monitors use even by scouts and other conservation minded groups.

A 2.6 ACRE MEMORIAL.

It is not the size that makes an area outstanding or important. In the forests of Dent County, Missouri, a remarkable stand of native azaleas (Rhododendron nudiflora) attracted attention. This area has not been disturbed for more than thirty years, and to perpetuate the beauty spot, Mr. Elmer Peterson, the owner, offered

the land to The Nature Conservancy. The Board of Governors approved the acceptance of the 2.6 acre gift in 1961 and also honored the wish of the donor to keep it as a memorial for his mother, Alma, by naming the area the "Alma Peterson Azalea Memorial". A bronze plaque to this effect has been erected. A local garden club erected a fence around the tract and took over the responsibility of policing and general custody of the area.

SCIENTISTS' EFFORTS ENLARGE NATIONAL MONUMENT.

Adjacent to the Craters of the Moon National Monument in Idaho there is an area which contains a raw, comparatively recent lava flow in an extremely broken and jagged form, and a 160 acre 'kipuka', an island of vegetation which is completely surrounded by lava flow. The kipuka is unique as an isolated remnant of undisturbed prairie flora.

Dr. F.R. Fosberg, then Vice President of the Board of Governors of the Nature Conservancy recognized the outstanding scientific values of the area. His efforts to safeguard the site for posterity led to a presidential proclamation. In 1962 the President of the United States added 5,361 acres to the Craters of the Moon National Monument. The area is now managed by the National Park Service of the U.S.A.

THE NATURE CONSERVANCY SAVES STATE THOUSANDS OF DOLLARS.

Adjacent to North Lake State Park, in New York, there is a high mountain overlook and scenic spot which was badly 'improved' by entertainment features based upon the legend of Rip Van Winkle. It proved to be a most detrimental feature to the adjacent Catskill Park. The State Conservation Department of New York hoped to remedy this situation by obtaining the property. When, however, the property came up for auction, the state could not participate in the bidding for obvious reasons. To solve the problem, The Nature Conservancy was asked to bid and acquire the property. At a later date, the State was in a position to take over the tract after complying with the necessary formalities.

This action served to improve conditions in a natural area and helped to establish a close working relationship between The Nature Conservancy and the Conservation Department of the State of New York.

COOPERATION WITH THE BUREAU OF LAND MANAGEMENT.

Cooperation with B.L.M. (Bureau of Land Management) not only doubled the area preserved in the Northern California coast range preserve but also greatly increased the effectiveness of the dollars given to The Nature Conservancy for land saving purposes.

United States Secretary of the Interior Steward L. Udall announced in 1961 that about 3,600 remote and isolated acres of the national land reserve in northern California have been dedicated for

purposes of scientific investigation in the fields of ecology and watershed management. These lands are under the administration of B.L.M.

Secretary Udall explained that the area forms part of the 6,500 acre Elder Creek watershed of the northern California Coast Range in Mendocino County, situated about 200 miles north of San Francisco. Some other 2,900 acres in the watershed belong to The Nature Conservancy. Secretary Udall stated that the Department's B.L.M., its Geological Survey, and The Nature Conservancy have laid the groundwork for cooperative studies in the area. It is a magnificent tract, the entire drainage basin remains virtually intact. The proposed withdrawal received wide coverage in conservation periodicals and the press. Over the entire country the public has been in favor of protecting the watershed for scientific research. The Nature Conservancy could report a similar response from its membership.

FORESTERS SUGGEST BEALL WOODS SHOULD BE PRESERVED NOT MANAGED.

East of Keensburg in Illinois, there is an area which contains the most important remaining virgin bottom hardwood forest of the midwestern United States. A magnificent stand of virgin timber along the Wabash River with gigantic tulip poplars in the coves, white oaks on the uplands, sweet gums and buroaks on the bottomland and a variety of rare trees such as rock elm, red oak, etc., scattered throughout the area.

In 1952, Mrs. Laura F. Beall asked Mr. Richard Tom (District Forester) and H.F. Siemert (now Assistant State Forester) to review her timberland prior to placing it under a plan of timber management. The foresters were so impressed by the magnificent forest, that they suggested the land should be preserved instead of managed. In 1962, The Nature Conservancy began to investigate the possibilities of obtaining the tract as a prospective natural area preserve. Unfortunately, a few months later, Mrs. Beall died suddenly and part of the land was sold by the court for three times the figure previously discussed with Mrs. Beall. However, the persons involved in the campaign to save the tract did not give up. At their insistence, The Nature Conservancy placed a good faith deposit in a bank, and, later on, condemnation proceedings were initiated so that the forest could be preserved under State ownership.

A STUDY AREA BECOMES A T.N.C. PROJECT.

There is a notable area in Preston County, West Virginia and Garrett County, Maryland. The total swamp, of which The Nature Conservancy now owns about one third, is roughly two miles long and from a quarter to a half mile wide. Muddy Creek, a sluggish darkbrown stream originates from two heads in the northern end of the swamp and flows entirely through it and on into the Youghiogheny River in Maryland. The area houses a relic colony of northern plants and animals in a southern latitude, preserved apparently from the time of the Ice Age by the high altitude (2,500 feet above sea

level), the cold moist condition, a frost pocket, and poor drainage. In addition to carrying the southermost colony of American larch or tamarack, hemlock, red spruce, Canada yew, red maple, wild red cherry, sweet birch and yellow birch also grow there. The luxuriance of Sphagnum permits the study of various plant species which may coexist with it.

Since 1873 naturalists have been aware of this important area but its preservation was not sought until March 1958, when Dr. Richard Goodwin and G. Flippo Gravatt visited the site and talked to local conservationists about saving the area. In June of 1959 a committee, headed by Dr. Earl L. Core, was formed to promote the project and in October 1960, The Nature Conservancy acquired title to the first parcel. Now the title to the entire tract has been obtained.

400 PEOPLE CONTRIBUTE TO KEEP "BLUE JEWEL LAKE" AREA UNSPOILED.

In Nelson and Hancock, New Hampshire, there is a mile and a half long, uninhabited peninsula, which separates the relatively undeveloped Nubanusit lake from smaller Spoonwood Lake. Lake Nubanusit, located in the towns of Nelson and Hancock is one of the "blue jewel lakes" of the Monadnock region, with crystal clear water. Spoonwood Lake does not have a house or dock to mar its shore. The Louis Cabot Preserve lies between these two lakes with four miles of unspoiled shoreline and 400 acres of uninhabited woodland. This is the last natural area in the New Hampshire Monadock region.

At a meeting of the Board of Governors in 1959, Dr. Richard Goodwin informed them about an interesting project group led by Mr. Richard E. Bennink. They wanted to undertake the preservation of these areas, owned by Dr. Briggs. A fund raising campaign, in which over 400 people contributed, together with a loan made the first purchase possible. On March 29, 1961, The Nature Conservancy purchased half of this 400 acres and leased the remaining half with option to purchase. The tract was named in memory of Dr. Brigg's late grandfather the "Louis Cabot Preserve".

GARDEN CLUB FURNISHES FUNDS.

Lodde's Mill Bluff is a steep walled vertical sandstone cliff in Wisconsin. At the north facing side a second growth deciduous forest can be observed. On the cliff itself many common Wisconsin plants are found, but also some unusual ones such as a variety of Aconitum moveboracense (a monk's hood)which was scientifically first described from this area, The oak opening on the level ridge top is rocky with flat, flaky dolomite outcrops. On the southern slope of the cliff, patches of dry prairies appear.

The forest on the north side was lumbered about 50 years ago.

The Lodde family used the dammed up Honey Creek waters at the foot of the bluff for their family mill. Corn fields are now where the dam and the lake used to be.

Throughout the past 50 years naturalists have visited and collected in this ecologically interesting area. In 1960 the Wisconsin Chapter of The Nature Conservancy decided to purchase the land and obtained an option on 35 acres of property. The Green Tree Garden Club of Milwaukee generously furnished the funds for the acquisition.

THE T. N. C. COOPERATES WITH THE STATE OF CALIFORNIA.

Near Monterrey Bay in California, the Marks family, one sister and two brothers, owned land which included impressive groves of virgin trees. They offered the property to the State of California. Two parcels to be used for park purposes and the balance of 7,500 acres to be kept as a natural area. The California Division of Beaches and Parks was most anxious to have the land, but could not acquire it by purchase as quickly as seemed necessary and was in danger of missing the opportunity. The Nature Conservancy then borrowed money by mortgage upon the land, purchased the property and will sell it to the State of California when the funds have been secured and State regulations for land purchase have been satisfied.

SALE OF LAND BELOW MARKET VALUE.

Dr. E.W. Cleary, a retired orthopedic surgeon, owned a 400 acre tract of forests, chaparral and grassland in California. He desired to keep it in its primitive state and free from development, except for the small area where the ranch buildings stand. He offered to sell the land to The Nature Conservancy at below market value. With the assistance of his niece, Mrs. Paul Marhenke, and the Northern California Chapter of The Nature Conservancy, the Biological Field Studies Association was formed. This group acts as a project committee for fund raising, land acquisition, and the preservation and use of the tract. To facilitate the committee's work, the purchase agreement called for payment in ten installments.

The property is now being used for research and education under the management of the Biological Field Studies Association.

COOPERATION WITH THE U.S. FOREST SERVICE.

The Sycamore Canyon in Arizona contains many unusual botanical specimen in a magnificent scenic surrounding. Ash trees, sycamores, and cottonwoods are abundant. The yew leaf willow, wild Cassiva, Gooding Ash, sweet acacia, can be listed among the uncommon plants. The little "spleen wort" Asplenium exiguum is one of the rarest ferns in the United States. A good representation of the northern Arizona fauna lives among the spectacular geological formations.

In the April 1946 issue of the "Journal of the New York Botanical Garden", Leslie N. Goulding described this canyon as "A Hidden Botanical Garden." In 1961, the same author made an appeal to save the area, since the grazing permits had been increased and the misuse of the land threatened to destroy the original vegetation.

Because the Sycamore Canyon forms part of the Coronado National Forest, The Nature Conservancy approached the Forest Service with the problem, pointing out the merits of protecting the area. After careful consideration by the authorities, some of the area was established as the Sycamore Canyon Scenic Area under Regulation U-3 of the Forest Service which means that its protection will be permanent.

A MAGAZINE ARTICLE INSPIRES LAND DONATION.

In 1959 the "Reader's Digest" published an article "Save a Spot of Beauty for America," and elaborated in it the work of The Nature Conservancy. Miss Evelyn E. Alverson of Jackson, Mississippi, read the article and contacted The Nature Conservancy regarding a tract of land she and her brother and sister-in-law owned in western New York. After negotiations with both the National Office and the Western New York Chapter of The Nature Conservancy, the 75 acre area was donated in September 1960. Later, ten more acres were donated and a 228 acre tract was purchased.

A bubbling brook known as Deer Lick passes through the sanctuary. Deer graze on the open pasture land, and ruffed grouse bring their young to the spring to drink. Old hemlocks fringe the steep cliffs along the mile or more long creek, and hermit thrushes sing within the flickering shadows. The beech, birch, maple, and hemlock woodland have not been lumbered for many years; therefore, the trees are large and the humus of the forest floor is rich and deep. Ferns grow in great profusion. Scarlet bee balm seems to be burning in the ruins of an old fireplace: the only remaining evidence of a long-gone summer cabin. This enchanting property is now known as the "Deer Lick Nature Sanctuary".

ANNEX A

Information Bulletin No. 5
Revised (August 1960)

CHECK LIST OF CRITERIA FOR EVALUATING CANDIDATE AREAS AS NATURE RESERVES

1. How natural is it?
   - Virgin area - protected by past owners or otherwise by-passed by human activity.
   - Mature biotic community.
   - Modified by man.
   - Degree of past disturbances: how long undisturbed?
     - Change of water level, polution, siltation, watershed protection.
     - Modification of vegetation, logging, farming, (past or present), grazing (past or present), mining, etc.; exotics present.

2. Will future permanence be likely?
   - Hydrologic: prospects of drainage or flooding.
   - Biotic: successional stage, exotics, etc.
   - Urbanization: industry, highways, residences.
   - Potential productivity for commodity use.
   - Population pressure - non-conforming recreational, etc.
   - Suitable organization on group to aid or take over area (college, government).

3. What about present economic value of area?
   - Commodity producing value.
   - Reality value (urban or summer).
   - Tax producing value to community.
   - "Open Space" or cultural value to community.

4. Is it in a good location?
   - Attitude and interest of present owner.
   - Neighborhood attitude, zoning, local and state laws.
   - Isolation from vandalism and overuse: caretaker needed?
   - Availability for use: nearness to educational, research, and population center.
   - Desired frequency of reserves -- distance apart: determined by deversity of types in region.

5. Is it the right size?
   - Administrative relationship: large areas need full-time custodian, small ones may need only part-time service of nearby resident.
   - Ecological aspects:
     - Can minimum populations of species be maintained for research.
     - Does the biotic community make a natural unit.
     - Buffer zone available: to reduce external influences, to divert visitor-use pressure from choice areas, etc.

6. What particular purposes will the reserve have?
   - Typicalness: as scientific natural area (active use or control area).
   - Diversity of features.
   - Uniqueness: rarity of types represented.
   - Amount already preserved.
   - Amenity features: beauty, wildlife, scenic.
   - Rare species preservation.
   - Natural area for schools, camp, nature center, etc.

This is not an attempt to establish arbitrary standards, but rather to provide a partial list of factors to be considered in determining the suitability of any particular area for preservation. Any arbitrary or generalized standards such as minimum size optimum frequenc of reserves, etc., would be meaningless when applied to a specific situation.

ANNEX B

LEGAL ASPECTS OF LAND ACQUISITION UNDER THE NATURE CONSERVANCY

To many, the purchase of real property involves all sorts of mysterious forms and procedures. But, like any other endeavor, the purchase of land is not difficult if one can follow a prescribed course of action or has a basic pattern to work from. What follows attempts to fill this need.

1. Appraisal of Land: Before commitments of any sort to acquire land are made, it should be ascertained that the proposed sales price is reasonable. If the members of the committee are not familiar with prices in the area, the employment of a professional appraiser might be considered, except when the total price is obviously small. Because professional appraisal of rural land deals primarily with the economic value of productive land, there is often a divergence of opinion on the real value of unique natural areas.

2. Option to purchase -- lease-option -- purchase agreement -- outright purchase: The most commonly used agreement first entered into by The Nature Conservancy in natural area land purchases is an option to buy a specific piece of land for a specific price. This allows time to raise funds and determine the probable success or failure of the project without a heavy initial financial commitment. An option form which should be used as a guide only is attached. Normally, even an option should not be obtained before the project has been authorized by the Board of Governors of The Nature Conservancy, but in case of emergency one can be secured without authorization, if the local group has funds available for the purpose.

In rare cases, a lease with an option to purchase may be used when an agreement for immediate purchase is not feasible for some reason, such as a lack of money for immediate purchase. A lease without option is not a generally acceptable instrument for preservation and is used only in very unusual instances. A purchase agreement is a contract for sale and purchase of land under a given price and with certain conditions which are binding on both parties. Thus the total amount of the purchase price should be available in the form of pledges, a loan or cash. Neither leases nor other land contracts may be entered into without the prior approval of the Board of Governors.

3. Outright Purchase: In some instances, it may be feasible to enter directly into an outright purchase, without option or contract (but with or without mortgage), as where a person interested in the preservation of the area is the owner and the necessary funds are available, either in the hands of the committee or partly by way of loan from The Nature Conservancy.

4. Time Purchase: There are two basic methods by which a time purchase can be effected, a purchase contract with payment in installments, or a conveyance with a purchase money mortgage on a "deed of trust". Under a purchase contract the original owner normally retains title to the land until the full price is paid, and thus tax exemption cannot be secured by the Conservancy. Whenever possible purchases made over a period of time should be by purchase money mortgage so that The Nature Conservancy obtains ownership immediately in order to be able to apply for tax exemption.

5. Title Search and Insurance: A title search is a review of the land records usually made by an attorney to disclose the true ownership of the land and to determine any defects in the title or recorded encumbrances on the property. In some regions it is customary to use title insurance, issued by a title company after its own search. One or the other of these two forms of protection is essential before a purchase except in unusual cases, such as a donation of land.

6. Survey of Lands: Lands in the western states need not be surveyed if they are readily identifiable by a straight line land survey. Some sites in the far west in mountainous country have not, even as yet, been surveyed. Areas in the Eastern U. S. should normally be surveyed, unless an adequate survey already exists on the lands being purchased, or the purchase covers all of a tract with boundaries well defined on the ground. Sometimes only a partial survey to locate one or two boundaries is needed if an area which is at present adequately surveyed is subdivided.

7. Liens: The option or contract should provide that the seller will, preferably before title passes, secure a release of liens against the property being sold to The Nature Conservancy. Alternatively, but rarely, the Conservancy might purchase subject to a specified mortgage or other lien, if the purchase was adjusted accordingly.

8. Type of Deed: The type of deed to be given on the property is of some importance with a warranty deed conveying unencumbered fee simple title being generally considered the most desirable. Only under special conditions will a quit-claim deed prove satisfactory, and it must be cleared by the legal counsel of The Nature Conservancy.

9. Closing: When the time comes for closing the purchase, it may be necessary to place the purchase money and authority in the hands of an escrow agent; however, often the project committee and its attorney can effect the closing less formally.

10. Employment of Attorney: The committee should be represented by an attorney in title search and in closing, including passing on the sufficiency of the documents, except in rare cases, such as a donation or perhaps, in some areas, when title insurance is used. Not infrequently a conservation-minded attorney will render the necessary service gratis, but otherwise there should be no hesitancy to provide for reasonable legal expenses.

11. Recording: Recording of the deed should take place at the appropriate recorder's office as soon as possible, preferably on the same day as the execution of the deed.

12. Real Property Tax Exemption: In the majority of states formal application for tax exemption of the appropriate lands should be made to the local assessor by means of a letter requesting exemption, backed up with such documents as copies of articles of incorporation, registration of The Nature Conservancy in the state, legal opinions, letters from appropriate legal officials, etc. The letter should of course cite the appropriate state statutes under which the exemption is being sought. Often informal consultation with the tax authorities before formal filing is helpful. There may be times when this procedure may have to be repeated if there exists more than one taxing authority for real property, such as a school district. Generally once exemption is established in a state, acquiring additional exemptions is easier. Barring some very particular local circumstance, tax exemption, when available, should always be sought, no matter how small the current burden seems. The national office of the Conservancy is ready to give assistance in preparing tax exemption requests. (See also Information Bulletin #29).

13. Title Transferred from The Nature Conservancy: If property owned by The Nature Conservancy is transferred to another agency a reverter clause back to The Nature Conservancy should be included to provide the legal safeguards for the preservation of the area in its natural condition. The Conservancy maintains a record of all deeds known to it under which it is the holder of a reverter.

14. Devises: Occasionally an owner of a natural area may not be inclined to sell or donate it to The Nature Conservancy, but is prepared to devise it to the Conservancy in his will. The Conservancy maintains a record of known devises which name it as the beneficiary.

15. Transfers or Sale of Lands: Only under the most unusual circumstances might the exchange or sale of lands be justifiable as benefitting preservation purposes. Such cases would be the elimination of gores, or the disposition of a non-natural part of a tract which had to be bought in its entirety to secure a natural portion. In the latter type of case, however, ample buffer land should be retained. In any event, no sale or exchange can be made without the prior approval of the Board of Governors.

16. Obligation of Preservation: Certain obligations for preservation including maintenance may be entered into with the donor or in rare instances with a seller. In the acquisition of natural areas by purchase at the going market price, the Conservancy will assume no obligation to preserve them except as funds are provided for that purpose in advance of purchase. The moral obligation of preservation is, however, applicable to all authorized Nature Conservancy preservation projects.

17. Reverter Clauses Against Conservancy: When property is given to the Conservancy, or sold to it at a distinct reduction below fair price, the Conservancy is prepared in principle to accept a reverter clause to the family of the former owner or to some other conservation agency. The most preferable form is one which simply requires the Conservancy to convey to another organization of its choice if in its opinion it can no longer preserve the property as a natural area. However, more stringent clauses will be given

careful consideration as all reverter arrangements must have the advance approval of the Board of Governors. The national office stands ready to help with suggestions as to suitable clauses.

18. Obligation of Management: The policies applying to the care of natural areas are currently stated in detail in Policy Bulletin #2.

ANNEX C

THE NATURE CONSERVANCY REVERTER CLAUSE

This conveyance is made subject to the express condition and limitation that the premises herein conveyed shall forever be held as a nature preserve, for scientific, educational, and esthetic purposes, and shall be kept entirely in their natural state, without any disturbance whatever of habitat or plant or animal populations, excepting the undertaking of scientific research and the maintenance of such fences and foot trails as may be appropriate to effectuate the foregoing purposes without impairing the essential natural character off the premises. Should the premises cease to be used solely as provided herein, then the estate hereby granted to the _____ _____, its successors and assigns, shall cease and determine and shall revert to and vest in THE NATURE CONSERVANCY, its successors and assigns, the said reversion and vesting to be automatic and not requiring any re-entry or other act or deed.

ANNEX D

THE NATURE CONSERVANCY BYLAWS, 1966 Revision

ARTICLE I

NAME

The name of this organization is The Nature Conservancy.

ARTICLE II

OBJECTIVES

The Nature Conservancy is a nonprofit corporation organized under the laws of the District of Columbia (a) to preserve or aid in the preservation of all types of wild nature, including natural areas, features, objects, flora and fauna, and biotic communities; (b) to establish nature reserves or other protected areas to be used for scientific, educational, and other esthetic purposes; (c) to promote the conservation and proper use of our natural resources; (d) to engage in or promote the study of plant and animal communities and of other phases of ecology, natural history, and conservation; (e) to promote education in the fields of nature preservation and conservation; and (f) to cooperate with other organizations having similar or related objectives.

ARTICLE III

MEMBERSHIP

Section 1. **Eligibility.** Any responsible individual or organization approving of the objectives of the Conservancy shall be eligible for membership.

Section 2. **Classes.** Members shall be of the following classes.

a) **Honorary.** Leaders in the field of nature conservation nominated by the Board of Governors and designated by vote of the membership at a regular meeting.

b) **Annual.** Individuals eighteen years or more of age or organizations, contributing five dollars or more per year for the general purposes of the Conservancy, in such classes as the Board of Governors may from time to time establish, who are elected by the Board.

c) **Life.** Individuals making a single contribution of $300 or more for the general purposes of the Conservancy, in such classes as the Board of Governors may from time to time establish, who are elected by the Board.

d) **Project.** Individuals or organizations participating in a project in such a manner as to warrant designation in accordance with standards established by the Board of Governors.

e) **Cooperating.** Individuals or organizations exchanging information or otherwise cooperating with the Conservancy in such a manner as to warrant designation by the Board of Governors.

f) **Junior.** Individuals less than eighteen years of age contributing two dollars per year for the general purposes of the Conservancy.

Section 3. **Duration.** Honorary and life members shall hold membership for life. Annual members shall hold membership for periods of one year, in accordance with procedures to be established by the Board of Governors. Project and cooperating members shall hold membership for such periods of not less than one year as may be designated by the Board of Governors.

Section 4. **Power to Govern.** Honorary, annual, and life members shall be eligible to vote, to hold office, and to participate in determining matters of policy.

All references to "member," "membership," and the like in Articles IV, VII, VIII, X, XI relate solely to members eligible under this section.

Section 5. **Other Rights.** Members shall be informed of activities and progress of the Conservancy through annual or more frequent reports. They may attend meetings of the Board of Governors as observers. They may inspect the records of the Conservancy. Members should support the Conservancy and participate in its efforts in every way possible.

Section 6. **Member Organizations.** Each member organization shall be represented in matters affecting the Conservancy by a single representative, who shall be the secretary of the member organization unless another representative is specifically designated in writing. Annual member organizations alone are entitled to vote and each such organization shall have only one vote.

ARTICLE IV

BOARD OF GOVERNORS

Section 1. **Composition.** The Board of Governors shall consist of the elective officers, ex-officio, and not less than nine nor more than thirty members at large, as determined by the Board. The members at large shall be chosen, insofar as possible, to represent the varied interests and geographical areas of concern to the Conservancy. They shall be elected as nearly as may be in three equal annual classes. A person elected to fill a vacancy before the expiration of a term shall complete the term.

Section 2. **Functions.** The Board of Governors shall be responsible for all business of the Conservancy and shall determine matters of policy not determined by the membership. It shall have charge of all finances and publications of the Conservancy. It shall have general charge of all meetings and elections. It may fill any vacancy in an office until the next regular election.

Section 3. **Delegation of Authority.** The Board of Governors may, at its discretion, establish committees, employ personnel, and authorize any officer, employee, or agent to enter into contracts on behalf of the Conservancy. The Board may also make rules and regulations governing the establishment and operation of affiliated units of the Conservancy.

ARTICLE V

EXECUTIVE COMMITTEE

Section 1. **Composition.** There shall be an Executive Committee which shall consist of not more than nine members of the Board of Governors, including all the elective officers. The members at large shall be designated by the Board. Notice of meetings of the committee shall be given to all other members of the Board of Governors, who may attend such meetings, but without power of vote.

Section 2. **Powers.** The Executive Committee shall have and may exercise when the Board of Governors is not in session all the powers of the Board that may lawfully be delegated, provided that the Committee shall not make final determinations of policy. Such determinations of policy as may be made on an interim basis shall be referred to the Board of Governors for approval in a meeting or by mail vote.

ARTICLE VI

OFFICERS

Section 1. **Title and Terms of Officers.** The elective officers of the Conservancy shall be a Chairman of the Board, not more than three Vice Chairmen, a Secretary, and a Treasurer, who shall be elected for terms of one year. The appointive officers shall be a President and such number of Vice Presidents and Assistant Secretaries as the Board of Governors may determine.

Section 2. **Chairman of the Board.** The Chairman of the Board shall be the senior officer of the Conservancy and shall have general responsibility for the functioning of the Conservancy between meetings of the Board of Governors or the Executive Committee. He shall arrange for and preside at the meetings of the Conservancy membership, Board of Governors, and Executive Committee, and appoint members of committees in the manner and to the extent provided for by the bylaws or by resolution of the Board of Governors.

Section 3. **Vice Chairman of the Board.** The Vice Chairman of the Board shall exercise the functions of the Chairman in his absence. If there is more than one Vice Chairman, the Board shall establish the order in which they shall act.

Section 4. **President and Vice Presidents.** The offices of President and Vice Presidents shall be held by persons appointed by the Board and serving for such terms and with such compensation and having such duties in the administration of the Conservancy as the Board may specify. No person holding office under this section shall be a member of the Board of Governors after his appointment, but the President shall be entitled to attend all meetings of the Board and Executive Committee, except at any executive session.

Section 5. **Secretary and Assistant Secretaries.**

a) The Secretary shall be responsible for the keeping of minutes of all meetings of the Conservancy membership, Board of Governors, and Executive Committee, and for the performance of all other duties normally pertaining to the office of Secretary.

b) The Assistant Secretaries shall be appointed by the Board of Governors. The provisions of Article IV, Section 1, and Article VII, Sections 1 and 2, shall not apply to the office of Assistant Secretary, but a member at large of the Board may also serve as an Assistant Secretary. The Board shall designate the order in which the Assistant Secretaries shall exercise the functions of the Secretary in his absence. Under the direction of the Secretary, the respective Assistant Secretaries shall also perform such duties of the office of Secretary as he may from time to time assign to them.

Section 6. **Treasurer.** The Treasurer shall supervise the soliciting of membership dues and contributions, keeping of financial records, and handling of the funds of the Conservancy. He shall be ex-officio a member of any committee dealing with financial or investment matters.

Section 7. **Additional Duties.** Each officer shall perform any other duties directed by the Board of Governors.

ARTICLE VII

NOMINATIONS AND ELECTIONS

Section 1. **Nominations.** At least six months prior to the annual meeting of the Conservancy, the Board of Governors shall appoint a nominating committee of not less than three members of the Conservancy to present nominations for elective officers and Governors to be acted upon at the meeting. Nominations for any such office may also be made by any member by letter to the Secretary signed by at least ten members eligible to vote at the annual meeting. All nominations shall be submitted not less than 40 days before the annual meeting and shall be included in the notice of the meeting. The consent of the nominee shall be obtained before his name is presented.

Section 2. **Election.** Election shall be by a majority of votes cast at the annual meeting. The Board of Governors may make provision for the casting of votes by mail.

Section 3. **Vacancies.** The Board of Governors may appoint a person to fill any vacancy among the elective officers or members of the Board at large. A person so appointed shall serve only until the next annual meeting, but shall be eligible for nomination and election for the remainder, if any, of the term thereafter.

ARTICLE VIII

MEETINGS

Section 1. **Frequency.** There shall be annual meetings of the Conservancy membership and of the Board of Governors. Other meetings of the Conservancy membership and the Board, and meetings of the Executive Committee, may be held at the call of the President. The President shall call a meeting when so requested in writing by any five Governors.

Section 2. **Notice.** Notice of any membership meeting of the Conservancy shall be sent to all members not less than 21 nor more than 60 days in advance of the date of the meeting. In addition, preliminary notice of the annual meeting shall be given not less than three months before the meeting. Reasonable notice shall be given of meetings of the Board of Governors and of the Executive Committee.

Section 3. **Quorums.** Twenty members shall constitute a quorum for the transaction of business by the membership of the Conservancy. Ten Governors shall constitute a quorum for the transaction of business by the Board of Governors. Five members shall constitute a quorum for the transaction of business by the Executive Committee. In the absence of a quorum at a duly called meeting a lesser number may adjourn the meeting from time to time until a quorum shall be present.

Section 4. **Proxies.** The Board of Governors may make provision for the use of proxies to vote on any question which may come before a meeting of the membership, excepting election of officers and governors.

ARTICLE IX

FISCAL POLICIES

Section 1. **Fiscal Year.** The fiscal year for all business transactions of the Conservancy shall be from July 1 of one year through June 30 of the following year.

Section 2. **Depositories.** The Board of Governors and duly chartered chapters are authorized to establish such accounts with banks, trust companies, and other financial institutions as the Board of Governors may deem appropriate.

Section 3. **Disbursements.** Disbursements shall be made only in accordance with a specific authorization or a general budget approved by the Board of Governors and on such terms, including appropriate provisions for bonds, as may be established by the Board.

Section 4. **Audits.** There shall be annual audit of central office accounts by a certified public accountant. The Board of Governors may direct the audit of other accounts at such times and in such manner as it may specify.

Section 5. **Endowment Funds.**

a) An Endowment Fund, including a Guarantee and Income Fund, shall be maintained and shall consist of all monies or other property respectively allocated by the Board of Governors. Subfunds may be established within the Fund, on such conditions as the Board may specify. The Fund shall be invested, either separately or in a pooled form, in such securities and other income producing property as the Board may determine.

b) The Board is authorized to retain such counsel or make such other arrangements for the management of the Fund as it deems appropriate, including the appointment of an Investment Committee of not less than three persons.

c) The income from the Fund shall accrue to the general fund or such other purpose as the Board may determine.

d) None of the principal of the Fund shall be devoted to any other purpose except pursuant to a vote of the Board approved in writing by at least two-thirds of the members of the Board, provided, however, that any or all of the assets corresponding to the Guarantee and Income Fund may, by ordinary, special or general vote of the Board, be pledged or otherwise utilized as security for loans from banks or others for natural area projects of the Conservancy or of other organizations or persons and in case of default shall be subject to sale or other disposition to satisfy the debt, in accordance with the terms of the pertinent instrument of security.

ARTICLE X

TERRITORIAL AND PROJECT OPERATIONS

Section 1. **Operations.** Territorial and project operations of the Conservancy shall be conducted in accordance with policies adopted by the Board of Governors. Among other things, these policies may provide for the following:

a) Acquisition, ownership, and operation of nature preserves by the Conservancy.

b) Apportionment of general income from a particular territory between operations in that territory and operations of the central organization.

c) Chartering of chapters and branch chapters to be organized and operated by the voting Conservancy members in their territories.

Section 2. **Natural Area Policies.** The Board of Governors shall adopt a code of policies for the management of natural areas. These policies shall apply to areas owned by the Conservancy and shall stand as a recommendation of the Conservancy to other agencies holding natural areas.

ARTICLE XI

AMENDMENTS

These bylaws may be amended by a two-thirds majority of the members voting at a duly called meeting, provided that the amendment has been previously approved by the Board of Governors and has been presented to the general membership not less than 21 days nor more than 60 days in advance of the voting date and provided that opportunity shall be given for presentation of arguments for and against the proposed change.

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SAVING NATURAL AREAS

A Manual for those concerned with land acquisition and preservation

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by Maria Buchinger, Ph. D.

September 1969

56